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**Cc:** Pennala, Virginia (DEQ)[PENNALAV@michigan.gov]; Battle, Jean M LRE (Jean.M.Battle2@usace.army.mil)[Jean.M.Battle2@usace.army.mil]; Okeefe, Colleen (DEQ)[OKEEFEC@michigan.gov]  
**From:** Wilson, Kristina (DEQ)  
**Sent:** Fri 1/20/2017 6:24:42 PM  
**Subject:** Back Forty Application Summary

Melanie,

I want to provide you a summary of the new Back Forty submission. I know that one of our immediate questions that we have is if the EPA will accept this application for review. When we met at the end of September with the applicant, you gave an example of a new project as one that applied for all the impacts, direct and indirect. This new submission is very similar to the old submission; however, the new application states that the wetlands that we previously discussed as impacted by pit dewatering are “perched” and not susceptible to reductions in the water table. There is no additional discussion of pit dewatering in this application.

After reading through the Indirect Impacts Analysis and the Wetland Hydrology Report, there is a significant amount of conflicting information. Additionally, I will not accept the wetland watershed budgets (that we briefly discussed during the pre-application meeting in November) that were included in the application with the intent of demonstrating perched wetlands. The budgets (referred to as ‘balances’ in the Indirect Impacts Study) do not use relevant onsite data for hydrology, soils, precipitation, evapotranspiration, and infiltration. The data used is taken from a 1974 USGS hydrologic publication that included a summary of ten counties in northeastern Wisconsin and three major watersheds and is not representational of the project site. Additionally, with these budgets, the applicant has not demonstrated that any of the wetlands are perched, by what the common definition of the term means in regards to wetlands. The impacts analysis demonstrates that wetlands will be impacted by drawdown while claiming the opposite through some very convoluted math using the baseline data from the 1974 publication. The budget summarizes that all water inputs into a wetland system are a “surplus” and a “surplus” will remain during operations, hence no impact. It does not take into account that wetlands require a certain amount of baseline hydrology to be a wetland and changes in that hydrology may impact the wetland system. This is more in line with a storm water management budget.

Additionally, the data and narrative of the Wetlands Hydrology Report directly contradict the Indirect Impacts Analysis with statements such as “Available stratigraphic information at the locations of the piezometer nests does not suggest widespread

potential for a perched or isolated wetland water table system” and “the hydrostratigraphic data did not provide conclusive information on wetland water sources” (C-11, 4-1). The Hydrology Report also includes the only soil information in the application that addresses a restrictive layer observed, which equated to <1’ of silt and all within wetlands displaying negative hydrostratigraphic pressure indicating a groundwater influx.

I have done a preliminary review of the application document and here is a summary of the application.

DEQ submission 2B5-QHB6-CZE8, Back Forty Project

Proposed Impacts: 16.16 acres regulated wetland, 754 linear feet of stream channel (detailed in appendix A-1, Section 3)

1.9 ac dredged for pit (WL 14/14a/15b)

3.9 ac filled for operations/ laydown (WL B1/ WL B2)

322 linear feet of stream filled (WL B1/ WL B2)

6.96 acres dewatered because of pit drawdown (WL 14/14a/15b) Includes 0.05 ac fill for River Road reroute.

3.35 ac of wetland lost due to 64% watershed reduction (WL B1/ WL B2)

422 linear feet of stream lost due to 64% watershed reduction

The following are items that have not been addressed from the August 26, 2016 letter issued by the DEQ for Clarification and Amplification to address the Federal Objection

River Road Reroute

The application shows a proposed relocation for River Road on the west side of the pit between the cut-off wall and the 100-year floodplain elevation.

The proposed reroute encroaches on the 30m buffer zone of cultural resources located along the Menominee River.

The applicant has not included any information from the Road Commission that they are aware of the proposed reroute and are working with the applicant to design the new route.

The applicant has not provided any information from the utility companies stating that they are aware that they will have to abandon a portion of the roadside utilities through the project area and establish a new utility corridor to the project area which is being proposed from the east (application includes a map of the proposed new corridor).

The applicant has not provided any information on if any portion of River Road or other local roadways will need to be upgraded to support additional traffic.

#### Pit Dewatering Impacts/ Groundwater Drawdown

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No additional information is included regarding potential drawdown impacts. No information is provided to support the watershed thresholds or determination of no impact with hydrology loss.

New figures and model show groundwater reduction in wetland areas not addressed as an impact in the application.

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No new alternatives for minimization presented (note: this application increases the

wetland fill). Additional alternatives are presented in the monitoring and adaptive management plan but are not addressed in the alternatives analysis.

### Stormwater Impacts

Culvert at WL 2b is not addressed.

### Surface Water Quality

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Discharge for non-contact water is not identified.

Some of the items included in the August 26 letter are addressed in the application but may not be addressed in sufficient detail. There are several additional items that are missing from the application, but this summary should provide you with an update on the current application in relation to where we were at with the previous application when it was withdrawn. When you have a chance, please give me a call and we can discuss if the EPA will accept this application for review.

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Kristi Wilson

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